

**City of Seattle • Executive Services Department  
Consumer Affairs Unit**

**Vehicle Scale Inspections  
Fact Sheet No. 9**

Operators of commercial vehicle scales must obtain **City Weighmaster licenses** from the City of Seattle. The Seattle Municipal Code requires that commercial vehicle scales be inspected and tested. The tests determine whether vehicle scales are accurate by verifying that measurement errors are within accepted tolerances. Licensed City Weighers issue certificates of weight that certify weights are true and correct.

**Applicable Laws:**

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|-------------------|---|
| <u>Washington</u> | <ul style="list-style-type: none"><li>• Revised Code of Washington (RCW), Chapter 19.94 "Weights and Measures – 1969 Act"</li></ul>                             |
| <u>Seattle</u>    | <ul style="list-style-type: none"><li>• Seattle Municipal Code (SMC), Chapter 7.04 "Weights and Measures Code", Subchapter VII "Weighmaster License".</li></ul> |

**Applicable Standards:**

- |      |   |
|------|---|
| NIST | <ul style="list-style-type: none"><li>• National Institute of Standards and Technology (NIST) Handbook 44 <i>Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices</i> (1999), Section 2.20 "Scales"</li></ul>  |
| NCWM | <ul style="list-style-type: none"><li>• National Conference on Weights and Measures (NCWM) Publication 12 <i>Examination Procedure Outlines for Weighing and Measuring Devices</i> (December 1991), EPO No. 13-E "Vehicle and Axle-Load Scales Equipped with Electronic Digital Indicators"</li></ul> |

**VEHICLE SCALES**

<u>Type of Business</u>	<u>No.</u>
Building Materials	1
Cement, Stone	14
Construction	3
Corn Syrup	2
Grocers	1
Flour Mill	1
Metal Products	3
Marine Terminal	35
Moving & Storage	1
Paper	1
Public Scale	5
Recycling	13
Refuse	6
Total	86

Vehicle scales are Class III L scales. The maximum scale division for indicators on vehicle scales with a capacity up to 200,000 lb. is 20lb. The **tolerance** for scales in service (maintenance tolerance) is given at Section T.N.3.1 (Table 6) in Handbook 44. The maintenance tolerance for a 15,000 lb. test weight (known weight) is 2 scale divisions or 40 lb. The tolerance for new or repaired vehicle scales (acceptance tolerance) is half the maintenance tolerance. The minimum **test weight** is the greater of 10,000 lb. or 12.5% of vehicle scale capacity (e.g., 15,000 lb. for a vehicle scale with a 120,000 lb. capacity).

**INSPECTIONS AND TESTS**

**INSPECTION.**

- |   |  |
|---|--|
| <ul style="list-style-type: none"><li>• Installation</li><li>• Marking</li><li>• Load cells</li><li>• Indicating and recording elements</li></ul> | <ul style="list-style-type: none"><li>• Weighing elements</li><li>• Approach</li><li>• Maintenance</li></ul> |
|---|--|

**TESTS.**

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>• Increasing load test</li><li>• Shift (section) test</li><li>• Strain-load test</li></ul> | <ul style="list-style-type: none"><li>• Zero-load balance</li><li>• Repeatability of indications</li></ul> |
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The load cells of vehicle scales placed in use after July 5, 1997 must be traceable to a **Certificate of Conformance** (CC) issued by the National Institute of Standards and Technology (NIST). The CC is evidence that a prototype of the device was found to conform with the requirements of Handbook 44.

The **registration fee** for large scales (>5,000 lb.) is \$52.00 annually. These fees are collected by the State of Washington and returned to the City of Seattle.

State weights and measures inspectors check vehicle scales located outside Seattle. (360) 902-1857.